

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

GESTURE TECHNOLOGY  
PARTNERS, LLC,

Plaintiff

v.

HUAWEI DEVICE CO., LTD.,  
HUAWEI DEVICE USA, INC.,

Defendants.

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CASE NO. 2:21-cv-00040-JRG  
(Lead Case)

JURY TRIAL DEMANDED

GESTURE TECHNOLOGY  
PARTNERS, LLC,

Plaintiff

v.

SAMSUNG ELECTRONICS CO., LTD.  
AND SAMSUNG ELECTRONICS  
AMERICA, INC.,

Defendants.

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CASE NO. 2:21-cv-00041-JRG  
(Member Case)

JURY TRIAL DEMANDED

**SAMSUNG DEFENDANTS' MOTION FOR  
SUMMARY JUDGMENT OF INVALIDITY UNDER § 101**

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## **I. INTRODUCTION**

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (“Defendants”) move for summary judgment of invalidity under 35 U.S.C. § 101 of the asserted claims of U.S. Patent Nos. 8,553,079 (“’079 Patent”), 8,878,949 (“’949 Patent”), 7,933,431 (“’431 Patent”), and 8,194,924 (“’924 Patent”) (collectively, “Patents-in-Suit”). The claims of all four patents reflect attempts to capture the abstract concepts of analyzing images to determine information such as a gesture performed, which is then used by three of the four patents to perform some function of the device—the ’079 Patent claims do nothing with the result of the image analysis. The claims recite generic computer components, such as a camera and processor, that merely perform basic routine functions for implementing these abstract concepts, the type of results-oriented, “apply it”-on-a-computer claims the Supreme Court held in *Alice* are patent ineligible.

None of the Patents-in-Suit purport to improve any technology and their claims do not recite any specific technological solutions, but instead use functionally recited, generic computer technology as a tool to implement the abstract concepts. The claims thus recite well-understood, routine, conventional activities previously known to the industry and do not recite an inventive concept. Accordingly, the claims should be held invalid as patent ineligible under § 101.

## **II. STATEMENT OF ISSUES TO BE DECIDED BY THE COURT**

Whether the asserted claims of the Patents-in-Suit are invalid under 35 U.S.C § 101.

## **III. STATEMENT OF UNDISPUTED MATERIAL FACTS**

1. Controlling a device using gestures was known by November 1998. Ex. 3 at 87:21-88:17.
2. The ’079 Patent discloses that the claimed “computer apparatus” can be a laptop. ’079 Patent at FIGS. 1-3, 1:63-2:2, 2:39-5:21.
3. Using LEDs as a light source was conventional by November 1998. Ex. 5, ¶ 338.

[REDACTED]

4. It was well-known that cameras and light sources could be fixed relative to a keypad, including in conventional laptops. Ex. 5, ¶ 338.

5. The '949 Patent discloses that its goal is to replace the conventional role of a photographer with a system that can take a picture when the subject is in a particular pose or performing a particular gesture. '949 Patent at 7:57-8:9.

6. The '949 Patent discloses there were already known cases “where the camera taking the picture actually determines some variable in the picture and uses it for the process of obtaining the picture.” '949 Patent at 1:24-30.

7. The '949 Patent discloses that “point and shoot capability also based on the age classification of the individuals whose picture is desired” was known. '949 Patent at 1:36-43.

8. The '949 Patent alleges that there was no known picture taking reference based on object position and orientation with respect to the camera. '949 Patent at 1:44-46.

9. The '949 Patent discloses using known photogrammetric techniques to obtain features of objects such as edges of arms. '949 Patent at 3:20-23.

10. The '949 Patent discloses using known or conventional machine vision techniques to determine a gesture. '949 Patent at 6:29-33, 10:40-44.

11. The '949 Patent discloses that its invention utilizes “commonplace” cameras. '949 Patent at 1:50-62.

12. The '431 and '924 Patents disclose that a handheld device can be controlled to transmit an image of a recognized object of interest over a mobile phone link. '431 Patent at 12:65-13:7; '924 Patent at 13:1-19.

13. The '431 and '924 Patents disclose that “the invention” is about analyzing the output of one or more cameras “to typically provide data concerning the location of parts of, or

objects held by, a person or persons” and to “provide various position and orientation related functions of use” with “the basic task of generating, storing and/or transmitting a TV image.” ’431 Patent at 2:20-23, 11:54-61; ’924 Patent at 2:20-23, 11:57-64.

14. The ’431 and ’924 Patents propose to add functionality to existing handheld devices. ’431 Patent at 11:62-67; ’924 Patent at 11:65-12:3.

15. The ’431 and ’924 Patents describe analyzing camera images for controlling a device in the context of large-screen TVs, automobiles, games, household work, and robot control systems. ’431 Patent at 3:23-33, 13:46-14:9, 14:10-17:2, 17:3-20:41, 20:42-22:7, 22:9-23:3, 23:52-25:35, 25:36-38; ’924 Patent at 3:27-37, 13:48-14:13, 14:14-17:25, 17:26-20:41, 20:52-22:7, 22:9-23:2, 23:51-25:36; 25:37-39.

16. The ’431 and ’924 Patents describe analyzing a camera image to determine position or movement information as “well known” and “known” in the art. ’431 Patent at 4:20-28, 6:66-7:2; ’924 Patent at 4:24-32, 7:3-5.

17. The ’924 Patent describes controlling a device based on the output of a camera as known in the art. ’924 Patent at 13:39-43, 26:6-10.

18. Handheld devices with two cameras having non-overlapping fields of view, one oriented to view a user and the other oriented to view an object other than the user, were known by November 1998. Ex. 3 at 93:10-95:16.

19. During prosecution of the ’431 Patent’s parent, the applicant stated that techniques for determining an object’s position or movement from a camera image were “well known” in the art at the time, were known since 1980, and that there were “many such methods” known to those of ordinary skill in the art at the time the invention was made. Ex. 7 at 1-3.

20. Transmitting and displaying data was a routine function of handheld devices, such as mobile phones, known at the time of the invention of the '431 and '924 Patents. '431 Patent at 12:65-13:7; '924 Patent at 13:1-11; Ex. 12 at 454:9-13; Ex. 5 ¶¶ 158, 332, 335.

21. The named inventor of the Patents-in-Suit, Dr. Timothy Pryor, did not invent a mobile phone. Ex. 12 at 454:9-13.

22. Cellular phones were conventional at the time of the invention of the '431 and '924 Patents. Ex. 5 ¶¶ 332, 335.

23. Sensing light, capturing images or pictures, and capturing video at a frame rate, such as 30 frames per second or more, were well-known, routine, and conventional operations of cameras at the time of the invention of the '431 and '924 Patents. Ex. 5 ¶¶ 332, 335.

24. It was conventional for computers to transmit information to other devices, including transmitting data over the internet, at the time of the invention of the '431 and '924 Patents. Ex. 5, ¶¶ 332, 335.

25. Displays were conventional components of handheld devices at the time of the invention of the Patents-in-Suit. Ex. 5, ¶¶ 158, 332, 335.

#### **IV. LEGAL STANDARDS**

Summary judgment should be granted if “there is no genuine dispute as to any material fact.” Fed. R. Civ. P. 56(a). Summary judgment is warranted if a party “fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which that party will bear the burden of proof at trial.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986).

The Supreme Court has held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable” under 35 U.S.C. § 101. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014). Under the Supreme Court’s two-step framework for determining patent eligibility, the court must first determine whether the claims are directed to a patent-ineligible concept, such as

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an abstract idea, and then whether they contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application. *Id.* at 217, 221.

Step one “often turns on whether the claims focus on the specific asserted improvement in computer capabilities or instead on a process that qualifies as an abstract idea for which computers are invoked merely as a tool.” *Customedia Techs., LLC v. Dish Network Corp.*, 951 F. 3d 1359, 1365 (Fed. Cir. 2020). Step one requires evaluating “the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *PersonalWeb Techs. LLC v. Google LLC*, 8 F. 4th 1310, 1315 (Fed. Cir. 2021) (citation omitted).

At step two, the abstract idea cannot itself provide the inventive concept, as “[a] claim for a *new* abstract idea is still an abstract idea.” *Id.* at 1318 (citation omitted) (emphasis in original). Claims that “merely ‘automate or otherwise make more efficient traditional . . . methods’” do not recite an inventive concept and are therefore patent ineligible. *Id.* at 1319 (citation omitted). The mere fact “that the techniques claimed are ‘groundbreaking, innovative, or even brilliant’ . . . is not enough for patent eligibility.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) (citation omitted). “Nor is it enough for subject-matter eligibility that claimed techniques be novel and nonobvious in light of prior art, passing muster under 35 U.S.C. §§ 102 and 103.” *Id.*

## **V. ARGUMENT**

### **A. The Asserted Claims of the ’079 Patent Are Patent Ineligible Under § 101**

#### **1. The Asserted Claims of the ’079 Patent Are Directed to the Abstract Idea of Observing and Determining a Gesture**

The asserted claims of the ’079 Patent (Claims 1-6, 8-9, 11, 14-15, 19, 21-25, 30) are directed to the abstract idea of observing and determining a gesture.



[REDACTED]

Claim 11 of the '079 Patent recites a computer apparatus with a camera for observing a gesture performed, a light source for illuminating the gesture, and a processor for determining the gesture based on the camera output. For purposes of infringement, GTP's expert has alleged that the light source may be a display. Ex. 1 (Occhiogrosso Rpt. Ex. SAMSUNG-079) at 29.

Claim 11 of the '079 Patent amounts to nothing more than obtaining and analyzing images to determine a gesture performed within the context of a generic computer environment. Such data collection and analysis is abstract. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353-54 (Fed. Cir. 2016) ("The advance [the claims] purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions. They are therefore directed to an abstract idea."). People have determined gestures, including in images and video, throughout history. The '079 Patent claims are results-oriented and at a high level of generality, claiming a generic computer apparatus with a camera, light source (*e.g.*, a display, according to GTP), and processor for performing the gesture determination, and they fail to provide any technological detail. *See id.* at 1356 ("Indeed, the essentially result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101, especially in the area of using generic computer and network technology to carry out economic transactions."). The claims "do not 'have the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.'" *Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1328 (Fed. Cir. 2020) (citation omitted). The claims are drafted functionally and are silent as to how the processor uses the camera to determine a gesture.

The claims of the '079 Patent are no less abstract than those held patent ineligible in *In re TLI*. The claims there recited a "digital pick up unit" (*i.e.*, a digital camera) in a "telephone unit,"

[REDACTED]

such as a “cellular telephone,” for capturing an image that is then transmitted to a server for classification and storage, and were found to be directed to the abstract idea of “classifying and storing digital images in an organized manner.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 610-13 (Fed. Cir. 2016). Despite reciting “concrete, tangible components such as ‘a telephone unit’ and a ‘server,’” the court in *In re TLI* held the “specification makes clear that the recited physical components merely provide a generic environment in which to carry out the abstract idea.” *Id.* at 611. The court found “the specification’s emphasis that the present invention ‘relates to a method for recording, communicating and administering [a] digital image’ underscores that [the claim] is directed to an abstract concept.” *Id.* (citation omitted).

The court in *In re TLI* further found the claims were “not directed to a specific improvement in computer functionality” but were “directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.” *Id.* at 611-12. Specifically, “the problem facing the inventor was not how to combine a camera with a cellular telephone, how to transmit images via a cellular network, or even how to append classification information to that data,” nor “was the problem related to the structure of the server that stores the organized digital images.” *Id.* at 612. The specification did “not describe a new telephone, a new server, or a new physical combination of the two” and “fail[ed] to provide any technical details for the tangible components, but instead predominately describe[d] the system and methods in purely functional terms.” *Id.* The “telephone unit” was described as having “the standard features of a telephone unit” with the addition of a digital image pick up unit that operates as a known digital photo camera, and the specification noted it was known that cellular telephones could transmit images, thus showing that “the telephone unit itself is merely a conduit for the abstract idea of classifying

[REDACTED]

an image and storing the image based on its classification.” *Id.* The server was similarly described “in terms of performing generic computer functions such as storing, receiving, and extracting data,” further showing that “the focus of the patentee and of the claims was not on an improved telephone unit or an improved server.” *Id.* at 612-13. The mere fact that “the claims limit the abstract idea to a particular environment—a mobile telephone system—[did] not make the claims any less abstract for the step 1 analysis.” *Id.* at 613; *see also Ericsson*, 955 F.3d at 1327.

The ’079 Patent does not even recite a telephone unit or a handheld device, but instead recites a generic “computer apparatus.” According to GTP, the claims only require a computer with a display, a camera, and a processor for performing their basic functions of emitting light, obtaining images, and processing an image, respectively. The problem facing the inventor was not how to invent a new computer apparatus, as the patent discloses that the computer apparatus can simply be a laptop. Ex. 2 (’079 Patent) at FIGS. 1-3, 1:63-2:2, 2:39-5:21. Nor was the problem facing the inventor how to determine a gesture from camera images, as the patent is devoid of such detail. This aligns with the admission of GTP’s technical expert that computers that could detect gestures from camera images already existed; namely, [REDACTED]

[REDACTED] Ex. 3 (Occhiogrosso Day 2 Tr.) at 87:21-88:17. It is also consistent with the admissions in the similar ’949 Patent by the same inventor, which discloses using “**known** machine vision techniques” or “**conventional** 2D machine vision type image processing (e.g. [*sic*] ‘Vision Bloks’ software from Integral Vision Corp.)” to determine a gesture.<sup>1</sup> Ex. 4 (’949 Patent) at 6:29-33, 10:40-44.

The inventor simply sought to implement the abstract concept of detecting a gesture from an image in a generic computer apparatus environment comprising a camera, light source, and

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<sup>1</sup> All emphasis is added unless otherwise stated.

[REDACTED]

processor. The claims of the '079 Patent “are not directed to a specific improvement to computer functionality,” but rather “they are directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.” *In re TLI*, 823 F.3d at 612. The hardware recited “is merely a conduit for the abstract idea” of determining a gesture from images. *Id.*; see also *Yu v. Apple Inc.*, 1 F.4th 1040, 1042-43, 1045 (Fed. Cir. 2021) (finding claim for an “improved digital camera” to be patent-ineligible under § 101 where claimed hardware was merely a “conduit” for the abstract idea of taking two pictures and using one to enhance the other). As such, the focus of the claims is not on an improved computer apparatus, but instead on the abstract idea of determining a gesture from images.

Claim 11 of the '079 Patent is representative. Claim 1 is essentially a method of using the apparatus recited in Claim 11. Claim 21 is a method that is mostly the same as Claim 1, but the work volume is above the camera instead of the light source and the gesture is limited to hand and finger gestures, which do not change the focus of the claims from the abstract idea of determining a gesture. The remaining claims depend from Claims 1, 11, or 21. These claims merely recite conventional components, such as LEDs for the light source (Claims 2-3, 14-15, 22-23)—GTP points to a conventional display for infringement—or fixing the camera and light source relative to a keypad as is the case with conventional laptops (Claims 9, 30), or they further describe the abstract idea, including the type of gesture detected (Claims 5, 19, 25), information determined (Claims 6, 8), or that sequential camera images are analyzed to determine the gesture (Claims 4, 24). Ex. 5 ¶¶ 158, 338. These additional limitations recited in dependent claims do not shift the focus of the claims away from the abstract idea of determining a gesture from images.

Accordingly, the asserted claims of the '079 Patent are directed to an abstract idea.

**2. The Asserted Claims of the '079 Patent Do Not Recite an Inventive Concept**

Apart from the abstract idea, Claim 11 of the '079 Patent contains nothing more than a generic computer apparatus that includes a camera, light source (*e.g.*, a display, according to GTP) and processor. The patent does not purport to invent a new computer apparatus, but uses existing laptops. '079 Patent at FIGS. 1-3, 1:63-2:2, 2:39-5:21; *see also* Ex. 5 (Stevenson Op. Rpt.) ¶¶ 337-39. Just as the “camera phone” alleged to be “a core feature of the invention” in *In re TLI* was insufficient to confer patent eligibility because it “behave[d] as expected” in that it “operates as a digital photo camera of the type which is known,” 823 F.3d at 614, the camera claimed in the '079 Patent operates as a conventional camera that captures an image. *See, e.g.*, '079 Patent at Claims 4, 24. And as explained above for step one, the generic processor analyzes the image using known computer vision techniques to implement the abstract idea of determining the gesture performed. Ex. 3 at 87:21-88:17; '949 Patent at 6:29-33, 10:40-44.

The other independent claims and the dependent claims similarly fail to recite any inventive concept. Claim 1 recites a method that essentially corresponds to using the apparatus recited in Claim 11, and therefore lacks an inventive concept for the same reasons. Claim 21 is a method that is mostly the same as Claim 1, but the work volume is above the camera instead of the light source and the gesture is limited to hand and finger gestures, neither of which provide an inventive concept. The patent ascribes no significance to the former but states that any camera location is usable so long as it points at the work volume, Ex. at 2:39-53, and the latter is just a restatement of the abstract idea. Claims 2-3, 14-15, and 22-23 recite using conventional LEDs as the light source, which according to GTP can be an LED display. Ex. 5 ¶¶ 158, 338. Claims 9 and 30 require fixing the camera and light source relative to a keypad, as with conventional laptops. *Id.* Claims 5, 19, and 25 specify the type of gesture detected, Claims 6 and 8 specify additional

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information that is determined, and Claims 4 and 24 describe analyzing sequential camera images to determine the gesture. All of these amount to nothing more than the abstract idea of analyzing an image to determine a gesture and therefore not an inventive concept. The additional limitations recited in the dependent claims do not shift the focus of the claims away from the abstract idea of determining a gesture from images.

In sum, the '079 Patent claims recite generic components that, as an ordered combination, act as a tool in performing their basic functions of capturing an image and analyzing data to carry out the abstract idea of observing and determining a gesture, serving as a generic environment for the abstract idea rather than an inventive concept. Thus, Claims 1-6, 8-9, 11, 14-15, 19, 21-25, and 30 of the '079 Patent are patent ineligible under § 101.

**B. The Asserted Claims of the '949 Patent Are Patent Ineligible Under § 101**

**1. The Asserted Claims of the '949 Patent Are Directed to the Abstract Idea of Capturing an Image Based on an Observed Gesture**

The asserted claims of the '949 Patent (Claims 13-14, 16, 18) are directed to the abstract idea of capturing an image based on an observed gesture.

Claim 13 of the '949 Patent recites an “image capture device” with a sensor and digital camera in a forward facing portion of the device housing, and a processing unit that detects a gesture performed based on the output of the sensor and subsequently captures an image using the digital camera. For purposes of infringement, GTP’s expert has alleged the claim only requires a camera and a processor because a single camera and the sensor within it can satisfy both the digital camera and the sensor limitations of Claim 13. Ex. 6 (Occhiogrosso Rpt. Ex. SAMSUNG-949) at 3; Ex. 10 (Occhiogrosso Day 1 Tr.) at 99:13-18, 100:12-15.

Thus, Claim 13 of the '949 Patent amounts to nothing more than analyzing images to determine a gesture and subsequently capturing an image within the generic environment of an

[REDACTED]

image capture device. Such data collection and analysis is abstract. *Elec. Power*, 830 F.3d at 1353-54. The '949 Patent claims are results-oriented and at a high level of generality, claiming a generic image capture device with a camera, a sensor (GTP says the sensor can be the camera's sensor), and a processor for performing the abstract image analysis and control functions, and they fail to provide any technological detail. *See id.* at 1356. The claims "do not 'have the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.'" *Ericsson*, 955 F.3d at 1328 (citation omitted). The claims are drafted functionally and are silent as to how the processor analyzes the camera output to determine a gesture. They only make a generic functional recitation that the processor uses the camera to determine a gesture.

As with the '079 Patent, the claims of the '949 Patent are no less abstract than those held patent ineligible in *In re TLI*. *See In re TLI*, 823 F.3d at 610-13. As in *In re TLI*, the problem facing the inventor of the '949 Patent was not how to invent a new image capture device or how to determine a gesture from camera images. The '949 Patent does not purport to create a new image capture device or new technology, but states that its goal is just to replace the conventional role of a photographer with a system that can take a picture when the subject is in a particular pose or performing a particular gesture. '949 Patent at 7:57-8:9. The patent admits that there were already known cases "where the camera taking the picture actually determines some variable in the picture and uses it for the process of obtaining the picture." '949 Patent at 1:24-30. One such known example described in the patent concerns "point and shoot capability also based on the age classification of the individuals whose picture is desired." '949 Patent at 1:36-43. The patent only purports to have invented using the position or orientation of an object for taking a picture. '949 Patent at 1:44-46. But limiting the information used does not change the abstract nature of the data analysis. *See SAP*, 898 F.3d at 1167 ("Information as such is an intangible,' hence abstract,

[REDACTED]

and ‘collecting information, including when limited to a particular content (which does not change its character as information), [i]s within the realm of abstract ideas.’”).

Further, the patent does not propose any new technology for determining the position or orientation of an object, but rather utilizes admittedly known and conventional techniques. For example, the patent states “[w]ith two or more cameras, such 3D data may also be obtained using other features of objects such as edges of arms and the likely [*sic*] using **known** photogrammetric techniques.” ’949 Patent at 3:20-23. The patent also discloses an embodiment where a picture is taken when the hand of a man moves towards the head of a woman, and “[t]o obtain the data, one can look for hand or head indications in the image using **known** machine vision techniques . . . .” ’949 Patent at 6:29-33. And the patent further discloses that “**conventional** 2D machine vision type image processing (e.g. [*sic*] ‘Vision Bloks’ software from Integral Vision Corp.) can be used to extract object features and their locations in the images retained.” ’949 Patent at 6:29-33, 10:40-44. Indeed, during prosecution of the parent of the ’431 Patent by the same inventor, the patentee admitted that techniques for determining position or movement of an object were “well known” at the time, and had been since 1980. Ex. 7 (’297 Patent File History, July 20, 2009 Applicant Remarks) at 1-3. And the ’949 Patent describes using “commonplace” cameras to obtain the image analyzed by these known, conventional machine vision techniques. ’949 Patent at 1:50-62.

Thus, the ’949 Patent does not provide some solution to a technological problem, but rather merely seeks to use a generic computer comprising conventional components as a tool to provide the service of taking a picture of a person in a pose or performing a gesture, a role that was long ago performed by human photographers. That the claim is focused on traditional human activity of determining a gesture further underscores it is directed to an abstract idea. *See Ericsson*, 955



[REDACTED]

F.3d at 1327 (finding the claims were directed to the abstract idea of controlling access to resources that was “pervasive in human activity” such as in libraries, offices, and banks).

The claims of the ’949 Patent “are not directed to a specific improvement to computer functionality,” but rather “are directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.” *In re TLI*, 823 F.3d at 612. The generic hardware recited “is merely a conduit for the abstract idea” of capturing in image based on an observed gesture. *Id.*; *see also Yu*, 1 F.4th at 1042-43, 1045. As such, the focus of the claims is not on an improved computer apparatus, but instead on the abstract idea of capturing an image based on an observed gesture.

Claim 13 is representative of the asserted claims of the ’949 Patent because all other asserted claims depend from Claim 13. Each of the dependent claims do not depart from the focus of Claim 13, but instead add further functional limitations of the computer or other conventional details. Claim 14 simply describes the type of gesture that is detected, *i.e.*, a hand motion. Claim 16 adds a generic “forward facing light source,” which can be a conventional display according to GTP. Ex. 6 at 12; Ex. 5 ¶¶ 158, 338. And Claim 18 recites that the claimed sensor is fixed in relation to the digital camera, which according to GTP is satisfied by a single camera because the camera is in fixed relation to the sensor within it. Ex. 6 at 3, 16; Ex. 5 ¶ 338. These additional limitations recited in the dependent claims do not shift the focus of the claims away from the abstract idea of capturing an image based on an observed gesture.

Accordingly, the asserted claims of the ’949 Patent are directed to an abstract idea.

**2. The Asserted Claims of the '949 Patent Do Not Recite an Inventive Concept**

Apart from the abstract idea, Claim 13 of the '949 Patent contains nothing more than a generic image capture device that includes a processing unit, camera and sensor. The sensor can be the camera's sensor according to GTP, such that apart from the abstract idea, the claim only requires a processing unit and a camera under GTP's infringement theory. The patent does not purport to invent a new image capture device, but instead merely describes using cameras that are "commonplace." '949 Patent at 1:50-62; *see also* Ex. 5 ¶¶ 340-43. Just as the "camera phone" alleged to be "a core feature of the invention" in *In re TLI* was insufficient to confer patent eligibility because it "behave[d] as expected" in that the camera "operates as a digital photo camera of the type which is known," 823 F.3d at 614, the camera and sensor claimed in the '949 Patent operate as a conventional camera and sensor that captures an image and senses light, respectively. *See, e.g.*, '949 Patent at Claim 13. As explained above for step one, the generic processor analyzes the image using conventional computer vision techniques in order to implement the abstract idea of determining the gesture performed. '949 Patent at 1:24-43, 3:20-23, 6:29-33, 10:40-44.

The dependent claims similarly fail to recite any inventive concept. Claim 14 merely describes the type of gesture that is detected, *i.e.*, a hand motion, and thus does nothing more than restate the abstract idea. Claim 16 adds a generic and conventional "forward facing light source," which can be a conventional display according to GTP. Ex. 6 at 12; Ex. 5 ¶¶ 158, 338, 342. And Claim 18 recites that the claimed sensor is fixed in relation to the digital camera, to which the patent ascribes no significance and which, according to GTP, is satisfied by a single conventional camera because the camera is in fixed relation to the sensor within it. Ex. 6 at 3, 16; Ex. 5 ¶ 342. These additional limitations recited in the dependent claims do not shift the focus of the claims away from the abstract idea of capturing an image based on an observed gesture.

[REDACTED]

In sum, the '949 Patent claims recite generic components that, as an ordered combination, act as a tool in performing their basic functions of capturing an image and analyzing data to carry out the abstract idea of capturing an image based on an observed gesture, serving as a generic environment for the abstract idea rather than an inventive concept. Thus, Claims 13-14, 16, and 18 of the '949 Patent are patent ineligible under § 101.

**C. The Asserted Claims of the '431 Patent Are Patent Ineligible Under § 101**

**1. The Asserted Claims of the '431 Patent Are Directed to the Abstract Idea of Taking Action Based on an Observed Movement or Position**

The asserted claims of the '431 Patent (Claims 1-3, 6-9, 11-22, 25-28, 30) are directed to the abstract idea of taking an action based on an observed movement or position; specifically, performing a function based on the position or movement of an object as determined from the analysis of an image.

Claim 7 recites a “[h]andheld computer apparatus” with a camera for obtaining an image of an object, a “computer means” for analyzing the image to determine position or movement information of the object, and a means for controlling a function of the apparatus using said information. The Court construed “computer means” to have its plain meaning and not as means-plus-function, whereas “means for controlling” is a means-plus-function limitation where the function is “controlling a function of a handheld computer apparatus using information concerning a position or movement of at least one object positioned by a user operating said object,” and the structure is “a control system programmed to control a function based on information concerning a position or movement of said object; and equivalents thereof.” Dkt. 93 at 15, 23.

For purposes of infringement, GTP alleged that the “computer means” can be a processor, Ex. 8 (Occhiogrosso Op. Rpt. Ex. SAMSUNG-431) at 26, and that the “means for controlling” can be (1) the same processor as the “computer means,” Ex. 9 (Final Infringement Contentions '431

[REDACTED]

Patent Claim Chart) at 15, (2) any “software and hardware” used to perform the claimed function, Ex. 8 at 29, or (3) an application that controls the device, Ex. 10 (Occhiogrosso Day 1 Tr.) at 104:18-24. The ’431 Patent discloses that a handheld device can be controlled to transmit an image of a recognized object of interest over a mobile phone link, which the Court cited in support of its conclusion that the specification discloses structure for the “means for controlling.” Ex. 11 (’431 Patent) at 12:65-13:7; Dkt. 93 at 14. GTP has also interpreted the “controlling” requirement of Claim 7 broadly, alleging that controlling the display of an image satisfies this limitation, and that display functions that may be controlled would include displaying a timer on a screen or merely “changing the display.” Ex. 8 at 29-30 ([REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]).

Thus, Claim 7 amounts to nothing more than obtaining an image, analyzing the image to determine position or movement of the object, and performing some function such as transmitting (or displaying, according to GTP) the result of that analysis, within the technological environment of a generic handheld computer apparatus. Indeed, the ’431 Patent introduces the handheld device embodiments by describing that “the invention” combines “one or more TV cameras . . . and a computer to provide various position and orientation related functions of use” with “the basic task of generating, storing and/or transmitting a TV image of the scene.” ’431 Patent at 11:54-61. Such data collection and analysis is abstract. *Elec. Power*, 830 F.3d at 1353-54. And the ’431 Patent claims are results-oriented and at a high level of generality, with no specific technological details for performing the abstract image analysis and control functions. *See id.* at 1356. Rather, the

[REDACTED]

patent simply claims a generic camera, computer means, and a control system, where under GTP's infringement theory, the computer means and control system can be the same processor such that the claims amount to nothing more than a camera and processor for performing the abstract image analysis and control functions.

The asserted claims of the '431 Patent parallel those at issue in *In re TLI*. Just as the claims in *In re TLI* recited a telephone unit, such as a cellular telephone, with a camera for capturing an image that is then transmitted to a server, Claim 7 of the '431 Patent recites a handheld computer apparatus with a camera for capturing an image that is analyzed to perform some function, such as transmitting the image to a remote location. 823 F.3d at 610-13. The specification of the '431 Patent emphasizes that "the invention" is about analyzing the output of one or more cameras "to typically provide data concerning the location of parts of, or objects held by, a person or persons" and to "provide various position and orientation related functions of use" with "the basic task of generating, storing and/or transmitting a TV image," underscoring the abstract nature of the claims. '431 Patent at 2:20-23, 11:54-61.

Like the patent in *In re TLI*, the '431 Patent does not purport to invent a new handheld computer apparatus, new camera, or new physical combination of the two. Instead, the '431 Patent proposes to "add functionality" that was well known in existing handheld devices. '431 Patent at 11:62-67. This aligns with the admission of the sole named inventor Dr. Timothy Pryor that he did not invent a mobile phone, and with the admission of GTP's expert that handheld devices with cameras were known in the art. Ex. 12 (Pryor Day 2 Tr.) at 454:9-13 [REDACTED] [REDACTED]); Ex. 3 at 93:10-95:16.

The '431 Patent ascribes no particular significance to using the claimed image analysis in the claimed handheld device as opposed to the other environments described in the specification,

[REDACTED]

such as large-screen TVs, automobiles, games, household work, and robot control systems, further showing that the focus of the claims is on the abstract idea for which the handheld device simply provides one of many well-known environments, not on any specific technological improvement. ’431 Patent at 11:54-67; *see also* 3:23-33, 13:46-14:9 (large-screen TV), 14:10-17:2 (automobile), 17:3-20:41, 22:9-23:3 (games), 20:42-22:7 (household work), 23:52-25:35 (robot control system), 25:36-38 (“The invention has a myriad of applications beyond those specifically described herein.”). The claimed image analysis for determining position or movement of an object is described by the patent as “well known” and “known.” ’431 Patent at 4:20-28 (“For example, the system described above for FIGS. 1 and 2 involving the photogrammetric resolution of the relative position of three or more known target points as viewed by a camera *is known* . . .”), 6:66-7:1 (“In a simple case, a subtraction of successive images can aid in identifying zones in an image having movement of features *as is well known*.”). The patentee also explained during prosecution of the parent of the ’431 Patent that such image analysis techniques were known since 1980, were used in NASA’s Space Shuttle, and were “now *well known* in the photogrammetry art, or more particularly in the field of computer vision, fields to which the present application applies.” Ex. 7 at 1-3 (emphasis added). And controlling a handheld device such as transmitting or displaying data was a routine function of known mobile phones that the inventor admitted he did not invent. ’431 Patent at 12:65-13:7; Ex. 12 at 454:9-13.

Rather than overcoming some technological problem, the inventor here merely sought to “provide various position and orientation related functions of use” within the generic environment of existing handheld devices using known image analysis techniques. ’431 Patent at 4:20-28, 6:66-7:1; Ex. 7 at 1-3. “[A]lthough the claims limit the abstract idea to a particular environment—a mobile telephone system—that does not make the claims any less abstract for the step 1 analysis.”

[REDACTED]

*In re TLI*, 823 F.3d at 613; *Ericsson*, 955 F.3d at 1327. The mere recitation of physical components does not remove the claims from the abstract realm. *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 770 (Fed. Cir. 2019) (“Claim 1 indicates that the abstract idea is associated with a physical machine that is quite tangible—an electric vehicle charging station. Claim 2 goes further, explaining that a vehicle may be connected to the apparatus via an electrical coupler. But as the Supreme Court indicated in *Alice*, whether a device is ‘a tangible system (in § 101 terms, a ‘machine’)’ is not dispositive.”); *In re TLI*, 823 F.3d at 611 (“However, not every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry.”). To the contrary, the claimed handheld computer apparatus, camera, computer means, and means for controlling are generic, conventional hardware components that perform their basic functions as in *In re TLI*, with the cameras performing their basic function of capturing an image, the computer means performing its basic function of processing data, and the means for controlling performing its basic function of controlling a device. In other words, the components are “merely a conduit for the abstract idea” of performing a function based on the analysis of an image. *See id.* at 612; *see also Yu*, 1 F.4th at 1042-43, 1045 (.

Further, the claims “do not ‘have the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.’” *Ericsson*, 955 F.3d at 1328 (citation omitted). The claims are drafted functionally and are silent as to how the camera image is analyzed to determine the position or movement information and how that information is used to control a function of the handheld computer apparatus.

And the recitation of a means-plus-function limitation in Claim 7 of the ’431 Patent is no different from the claims found patent ineligible in *In re TLI*, which also recited means-plus-function limitations (“means for allocating classification information prescribed by a user of said

[REDACTED]

at least one telephone unit to characterize digital images obtained by said digital pick up unit” and “means . . . to allocate information in the corresponding digital still image data.”). *In re TLI*, 823 F.3d at 610. Indeed, GTP alleges the “means for controlling” limitation is satisfied by a general purpose processor, and thus provides no specific structure beyond a conventional and fundamental computing component.

Thus, Claim 7 of the ’431 Patent requires nothing more than a generic handheld computer apparatus with a camera for performing its basic function of obtaining an image, and a processor and generic control system (which GTP alleges can be the same processor) for analyzing the image and controlling the device based on the result according to what the patent admits are well-known processes. As such, the claims merely limit the abstract idea to a generic handheld computer environment, which does not make the claims any less abstract. *In re TLI*, 823 F.3d at 613.

Claim 7 of the ’431 Patent is representative. Claim 1 is a method similar to Claim 7, wherein the object is a finger that has its movement sensed by a sensor, a camera being an example, and said movement is used to control the handheld computing device. In Claim 14, the object is a portion of the user’s body or an object held by the user and the camera image is analyzed to determine a user input command to control the device. The remaining claims depend from Claims 1, 7, or 14. The dependent claims do nothing more than recite the basic operations of a camera (Claims 2-3, 15, 26, 28), further describe the abstract idea (Claims 6, 8-9, 16-22, 25, 27, 30), recite generic and conventional components such as a “light source” (Claim 12), which GTP alleges can simply be the display of the device, Ex. 8 at 44, or limit the handheld device to a cellular phone (Claims 11, 13). The additional limitations recited in these claims do not shift the focus of the claims away from the abstract idea. Ex. 5 ¶¶ 332, 335.

Accordingly, the asserted claims of the ’431 Patent are directed to an abstract idea.



**2. The Asserted Claims of the '431 Patent Do Not Recite an Inventive Concept**

Apart from the abstract idea, Claim 7 of the '431 Patent only recites a generic handheld computer apparatus that includes a camera, a computer means, and a control system, where the computer means can also be the control system according to GTP. The patent does not purport to invent a new handheld device, but merely to add functionality that was well known to existing handheld devices, '431 Patent at 11:62-67, and GTP's expert admitted that a handheld device with a camera was known in the art, Ex. 3 at 93:10-95:16. *See also* Ex. 5 ¶¶ 329-33. Just as the "camera phone" alleged to be "a core feature of the invention" in *In re TLI* was insufficient to confer patent eligibility because it "behave[d] as expected" in that the camera "operates as a digital photo camera of the type which is known," 823 F.3d at 614, the camera claimed in the '431 Patent operates as a conventional camera that captures an image. *See, e.g.*, '431 Patent at Claim 7. The "computer means" and "means for controlling" are functionally defined generic computing components, both of which amount to nothing more than a processor according to GTP, that similarly analyze the image in a manner described by the patent and during prosecution as "well known" or "known," as explained above for step one, in order to perform a basic computer function such as displaying data or transmitting data. *See* '431 Patent at 4:20-28, 6:66-7:1; Ex. 7 at 1-3.

The other independent claims and the dependent claims similarly fail to recite any inventive concept. Claim 1 recites a method that uses movement of a finger as sensed by a sensor to control a handheld device, and thus like Claim 7 recites no inventive concept, only the abstract idea as implemented using a generic sensor. Claim 14 similarly only recites a camera for capturing an image and a computer for determining a user input command and controlling a handheld device based on that command, and thus also recites no inventive concept, but only the abstract idea as implemented using a generic camera and computer. Claims 11 and 13 limits the handheld device

[REDACTED]

to a cellular phone, which is still a conventional component that does not change the nature of the claim. Ex. 5 ¶¶ 332, 335. Claims 2-3, 15, 26 and 28 recite the basic operation of cameras, *i.e.*, sensing light, capturing images or pictures, and capturing video at a particular frame rate, and thus only recite the well-known, conventional, and routine operation of cameras. Ex. 5 ¶¶ 332, 335. Claims 6, 8-9, 16-22, 26-27, and 30 recite the result of the image analysis or the control function performed by the computer at a high level of generality, and thus merely recite the abstract idea rather than an inventive concept. Claim 25 describes the basic and conventional function of a computer transmitting information to another device and therefore does not add any inventive concept. Ex. 11 at 12:65-13:7; Ex. 12 at 454:9-13; Ex. 5 ¶¶ 158, 332, 335. And Claim 12 merely recites that the handheld computer apparatus includes a generic “light source,” which GTP alleges can be a display, a conventional component of handheld devices. Ex. 5 ¶¶ 158, 332, 335.

In sum, the ’431 Patent claims recite generic components that, as an ordered combination, act as a tool in performing their basic functions of capturing an image and analyzing data to carry out the abstract idea of taking an action based on an observed movement or position, serving as a generic environment for the abstract idea rather than an inventive concept. Thus, Claims 1-3, 6-9, 11-22, 25-28, 30 of the ’431 Patent are patent ineligible under § 101.

**D. The Asserted Claims of the ’924 Patent Are Patent Ineligible Under § 101**

**1. The Asserted Claims of the ’924 Patent Are Directed to the Abstract Idea of Taking Action Based on an Observation**

Similar to its parent, the ’431 Patent, with which the ’924 Patent shares nearly the same specification, the asserted claims of the ’924 Patent (Claims 1-7, 10, 12, 14) are directed to the abstract idea of taking action based on an observation; specifically, performing a function based on the analysis of an image.


[REDACTED]

Claim 1 of the '924 Patent, from which all other claims depend, recites a generic handheld device that is controlled by a computer based on the output of at least one of two cameras. The '924 Patent describes one way of controlling a handheld device as transmitting an image over a mobile phone link. Ex. 13 ('924 Patent) at 13:1-19. GTP has interpreted the “control function” of Claim 1 broadly, alleging that controlling the display of an image satisfies this limitation. Ex. 14 (Occhiogrosso Op. Rpt. Ex. SAMSUNG-924) at 9-10 ([REDACTED])

[REDACTED]

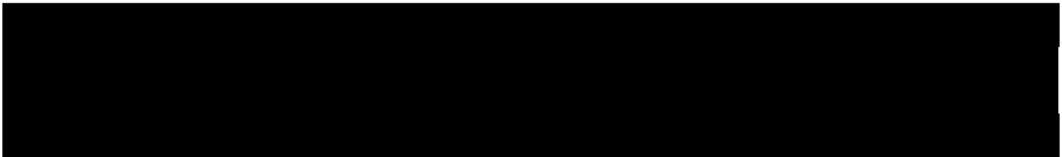
[REDACTED]). Claim 1 thus merely amounts to obtaining an image, analyzing that image, and performing some function such as transmitting (or displaying, according to GTP) the result of that analysis, within the technological environment of a generic handheld device. *See also* '924 Patent at 11:57-64 (describing “the invention” as “provid[ing] various position and orientation related functions of use” with “the basic task of generating, storing and/or transmitting a TV image”). Such data collection and analysis is abstract. *Elec. Power*, 830 F.3d at 1353-54. Further, the asserted claims recite such image analysis at a high level of generality, without setting forth any specific technological details for the abstract steps of obtaining and analyzing the image and controlling the device based on the results of that analysis. Such results-oriented functional claiming is typical of claims held to be invalid under § 101. *See id.* at 1356.

The asserted claims of the '924 Patent are similar to those found patent ineligible in *In re TLI*, in which the Federal Circuit held that claims reciting a “digital pick up unit” (*i.e.*, a digital camera) in a “telephone unit,” such as a “cellular telephone,” for capturing an image that is then transmitted to a server for classification and storage were merely directed to the abstract idea of “classifying and storing digital images in an organized manner.” *In re TLI*, 823 F.3d at 610-13. Just like the claims found unpatentable in *In re TLI*, Claim 1 of the '924 Patent recites a handheld



device, computer, and cameras that “merely provide a generic environment in which to carry out the abstract idea” of performing a function based on analysis of an image. Just as in *In re TLI*, the specification’s emphasis that “[t]he invention uses single or multiple TV cameras whose output is analyzed and used as input to a computer, such as a home PC, to typically provide data concerning the location of parts of, or objects held by, a person or persons” underscores that the claims are directed to the abstract concept of analyzing an image to perform a function. ’924 Patent at 2:20-23. The abstract nature of the claims is further underscored by the specification’s emphasis that “[t]he invention herein . . . comprehends a combination of one or more TV cameras (or other suitable electro-optical sensors) and a computer to provide various position and orientation related functions of use” with “the basic task of generating, storing and/or transmitting a TV image of the scene acquired either in two or three dimensions.” ’924 Patent at 11:57-64.

The ’924 Patent claims are not directed to a specific improvement in computer functionality, but rather are directed to the use of conventional or generic technology in a nascent but well-known environment. As in *In re TLI*, the ’924 Patent does not describe a new handheld device, new cameras, or a new physical combination of the two. The patent explains that the goal was to simply “add functionality” that was well known to existing handheld devices, not invent a new handheld device. ’924 Patent at 11:65-12:3. This aligns with the admission of the sole named inventor Dr. Timothy Pryor that he did not invent a mobile phone. Ex. 12 at 454:9-13. This further aligns with the admission of GTP’s technical expert that the handheld device claimed in the ’924 Patent, with two cameras having the claimed orientations and non-overlapping fields of view, was known in the art by November 1998, prior to the claimed priority date.



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Ex. 3 at 93:10-95:16. Moreover, GTP's technical expert admitted that the '924 Patent provides no details on how to implement a handheld device with two cameras, which is further evidence that the focus of the patent was not on solving some unstated problem in combining two cameras with a handheld device. *Id.* at 78:12-18 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. Instead, as in *In re TLI*, the hardware is described in purely functional terms.

Further, the patent ascribes no particular significance to using the claimed image analysis in the claimed handheld device as opposed to other environments described in the specification, such as large-screen TVs, automobiles, games, household work, robot control systems, and more, further showing that the focus of the claims is on the abstract idea in which the handheld device merely provides one of many well-known environments, not on any alleged specific technological improvement. '924 Patent at 11:56-12:3; *see also* 3:27-37, 13:48-14:13 (large-screen TV), 14:14-17:25 (automobile), 17:26-20:41, 22:9-23:2 (games), 20:52-22:7 (household work), 23:51-25:36 (robot control system); 25:37-39 ("The invention has a myriad of applications beyond those specifically described therein."). The '924 Patent describes the details of the image analysis and controlling a display as "well known" or "known." '924 Patent at 4:24-32 ("For example, the system described above for FIGS. 1 and 2 involving the photogrammetric resolution of the relative position of three or more known target points as viewed by a camera *is known* . . . ."), 7:3-5 ("In

[REDACTED]

a simple case, a subtraction of successive images can aid in identifying zones in an image having movement of features *as is well known*.”), 13:39-43 (“For example, if pointed at a screen saying email message number 5, the camera of the device can be used to obtain this image, recognize it through *known* character recognition techniques, and process it for transmission if desired.”), 26:6-10 (“With this feature of the invention, there is no requirement to carry a computer display with you as with an infrared connection (not shown) such *as known in the art* one can also transmit all normal control information to the display control computer 1951.”). The patentee also explained in prosecuting the ‘924 Patent’s grandparent, that such image analysis techniques were known since 1980, used in NASA’s Space Shuttle, and “now *well known* in the photogrammetry art, or more particularly in the field of computer vision, fields to which the present application applies.” Ex. 7 at 1-3 (emphasis added). Further, performing a control function such as transmitting or displaying data was a routine function of known mobile phones that the inventor admitted he did not invent. ’924 Patent at 13:1-10; Ex. 12 at 454:9-13.

Rather than overcoming some technological problem, the inventor here merely sought to “provide various position and orientation related functions of use” within the generic environment of existing handheld devices using known image analysis techniques. ’924 Patent at 4:24-32, 7:3-5, 11:65-12:3, 13:39-43, 26:6-10; Ex. 7 at 1-3. “[A]lthough the claims limit the abstract idea to a particular environment—a mobile telephone system—that does not make the claims any less abstract for the step 1 analysis.” *In re TLI*, 823 F.3d at 613; *Ericsson*, 955 F.3d at 1327. The mere recitation of physical components is insufficient to remove the claims from the abstract realm. *ChargePoint*, 920 F.3d at 770; *In re TLI*, 823 F.3d at 611. Rather, the claimed handheld device, cameras, and computer are generic, conventional hardware components that perform their basic functions as in *In re TLI*, with the cameras performing their basic function of capturing an image

[REDACTED]

and the computer performing its basic function of processing data and performing a control function. In short, these components are “merely a conduit for the abstract idea” of performing a function based on the analysis of an image. *See In re TLI*, 823 F.3d at 612.

Further, the claims “do not ‘have the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it.’” *Ericsson*, 955 F.3d at 1328 (citation omitted). The claims are drafted functionally and are silent as to how the camera outputs are used to control the handheld device. They only make a generic functional recitation that the device is controlled based on at least one of the two camera outputs.

Moreover, the recitation of physical components in the asserted claims of the ’924 Patent does not make the claims patentable any more than the recitation of physical components in the claims at issue in *Yu v. Apple*. There, the Federal Circuit found that claims for “an improved digital camera” with two separate image sensors for producing an enhanced digital image were “directed to the abstract idea of taking two pictures (which may be at different exposures) and using one picture to enhance the other in some way.” 1 F.4th at 1042-43. The Federal Circuit found that the recitation of “conventional camera components”—“two image sensors, two lenses, an analog-to-digital converting circuitry, an image memory, and a digital image processor”—were “set forth at a high degree of generality” and performed their basic functions to effectuate the enhanced image merely provided “a generic environment in which to carry out the abstract idea.” *Id.* at 1043. Similarly, the two conventional cameras and computer recited in the handheld device of the ’924 Patent are functionally defined at a high level of generality for performing their basic functions of capturing an image and performing a control function based on analysis of the image.

Claim 1 is representative of the asserted claims of the ’924 Patent because all other claims depend from Claim 1. Each dependent claim does not depart from the focus of Claim 1, but instead

[REDACTED]

adds further functional limitations or other conventional details. Claim 2 limits the handheld device to a mobile phone, which does not change the focus from the image analysis and control function in Claim 1. Claims 3-5 recite the basic operation of cameras, *i.e.*, capturing images and video. Claims 6-7, 10, 12, and 14 describe additional functions performed by the computer at a high level of generality, and do not shift focus from the abstract idea.

Accordingly, the asserted claims of the '924 Patent are directed to an abstract idea.

**2. The Asserted Claims of the '924 Patent Do Not Recite an Inventive Concept**

Apart from the abstract idea, the asserted claims of the '924 Patent fail to recite elements that individually or in an ordered combination transform the abstract idea into a patent-eligible application of that idea. “It is well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea,” but rather, “the components must involve more than performance of ‘well-understood, routine, conventional activit[ies]’ previously known to the industry.” *In re TLI*, 823 F.3d at 613 (citation omitted). The '924 Patent claims recite a handheld device with a computer and two cameras having certain orientations and non-overlapping fields of view. The patent does not purport to invent a new handheld device, but merely to add functionality that was well known to existing handheld devices, '924 Patent at 11:65-12:3, and GTP’s technical expert admitted a handheld device with two cameras having the claimed orientations and non-overlapping fields of view was known in the art and the patent provides no detail on how to implement two cameras in a handheld device, Ex. 3 at 78:12-18, 93:10-95:16. *See also* Ex. 5 ¶¶ 334-36. As in *In re TLI*, these recited components are described as “either performing basic computer functions such as sending and receiving data, or performing functions ‘known’ in the art,” or in other words, “the claimed functions are ‘well-understood, routine, activit[ies]’ previously known to the industry.” 823 F.3d at 613-14 (citation omitted). Just as the



[REDACTED]

“camera phone” alleged to be “a core feature of the invention” in *In re TLI* was insufficient to confer patent eligibility because it “behave[d] as expected” in that the camera “operates as a digital photo camera of the type which is known,” *id.* at 614, the cameras claimed in the ’924 Patent operate as conventional cameras that capture an image or video. *See, e.g.*, ’924 Patent at Claims 3-5. The computer claimed in the ’924 Patent similarly analyzes the image in a manner described by the patent and during prosecution as “well known” or “known,” as explained above for step one, in order to perform a basic computer function such as displaying data or transmitting data. *See* ’924 Patent at 4:24-32, 7:3-5, 13:39-43, 26:6-10; Ex. 7 at 1-3.

The dependent claims also lack an inventive concept. Claim 2 limits the handheld device to a mobile phone, which is still a conventional component that does not change the nature of the claim. Ex. 5 ¶¶ 332, 335. Claims 3-5 recite the basic operation of cameras, *i.e.*, capturing images and video, and thus only recite the well-known, conventional, and routine operation of cameras. Claims 6-7, 10, and 12 recite the result of the image analysis performed by the computer at a high level of generality and thus simply recite the abstract idea rather than an inventive concept. Ex. 5, ¶¶ 332, 335. Claim 14 describes the basic and conventional function of a computer transmitting information over the internet and therefore does not add any inventive concept. Ex. 5 ¶ 335.

In sum, the ’924 Patent claims recite generic components that, as an ordered combination, act as a tool in performing their basic functions of capturing an image and analyzing data to carry out the abstract idea of taking action based on an observation, serving as a generic environment for the abstract idea rather than an inventive concept. Thus, Claims 1-7, 10, 12, and 14 of the ’924 Patent are patent ineligible under § 101.

## VI. CONCLUSION

For the reasons above, Samsung respectfully requests summary judgment that the asserted claims of each of the Patents-in-Suit are invalid under § 101.

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Respectfully submitted,

By: /s/ Christopher W. Kennerly  
Christopher W. Kennerly (TX Bar No. 00795077)  
chriskennerly@paulhastings.com  
Radhesh Devendran (*pro hac vice*)  
radheshdevendran@paulhastings.com  
Boris S. Lubarsky (*pro hac vice*)  
borislubarsky@paulhastings.com  
David M. Fox (*pro hac vice*)  
davidfox@paulhastings.com  
PAUL HASTINGS LLP  
1117 S. California Avenue  
Palo Alto, CA 94304  
Telephone: (650) 320-1800  
Facsimile: (650) 320-1900

Allan M. Soobert  
allansoobert@paulhastings.com  
PAUL HASTINGS LLP  
2050 M Street NW  
Washington, D.C. 20036  
Telephone: 202-551-1700  
Facsimile: 202-551-1705

Elizabeth L. Brann  
elizabethbrann@paulhastings.com  
PAUL HASTINGS LLP  
4747 Executive Drive, 12th Floor  
San Diego, CA 92121  
Telephone: (858) 458-3000  
Facsimile: (858) 458-3005

Robert Laurenzi  
robertlaurenzi@paulhastings.com  
PAUL HASTINGS LLP  
200 Park Avenue  
New York, NY 10166  
Telephone: (212) 318-6000  
Facsimile: (212) 319-4090

Melissa R. Smith (TX Bar No. 24001351)  
GILLAM & SMITH, LLP  
303 S. Washington Ave.  
Marshall, TX 75670  
Telephone: (903) 934-8450  
Facsimile: (903) 934-9257

[REDACTED]

melissa@gillamsmithlaw.com

*Attorneys for Defendants Samsung Electronics  
Co., Ltd and Samsung Electronics America, Inc.*

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on December 1, 2021. As of this date, all counsel of record had consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A) and by email.

/s/ Christopher W. Kennerly  
Christopher W. Kennerly

**CERTIFICATE OF AUTHORIZATION TO SEAL**

I hereby certify that under Local Rule CV-5(a)(7), the foregoing document is filed under seal pursuant to the Court's Protective Order entered in this matter.

/s/ Christopher W. Kennerly  
Christopher W. Kennerly